

**DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION**  
**(FOR INTEL CORPORATION PATENT APPLICATIONS)**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship is as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **MICROFLUIDIC APPARATUS, SYSTEMS, AND METHODS FOR PERFORMING MOLECULAR REACTIONS**, the specification of which

XX is attached hereto.

\_\_\_\_\_ was filed on \_\_\_\_\_ (Attorney Docket No. INTEL1450)

as U.S. Application Serial No. \_\_\_\_\_

and was amended on \_\_\_\_\_ if applicable (the "Application").

**I hereby authorize and request insertion of the application serial number of the Application when officially known.**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability of the subject matter of the Application as defined in Title 37, Code of Federal Regulations ("C.F.R."), § 1.56.

With respect to the Application, I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

_____	_____
(Application Serial No.)	(Filing Date)

_____	_____
(Application Serial No.)	(Filing Date)

With respect to the Application, I hereby claim the benefit under 35 U.S.C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability of the subject matter of the Application as defined in Title 37, C.F.R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of the Application:

_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)

_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United

States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

COUNTRY	APPLICATION NO.	FILING DATE	PRIORITY CLAIMED	
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby appoint the persons listed on Appendix A hereto (which is incorporated by referenced and a part of this document) as my respective patent attorneys and patent agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith.

I have reviewed Title 37, Code of Federal Regulations, Section 1.56, Duty to Disclose Information Material to Patentability, attached hereto as Appendix B. I hereby authorize and request insertion of the application number of the Application when officially known.

Direct all telephone calls to:  
LISA A. HAILE, J.D., PH.D.  
Telephone: (858) 677-1456  
Attorney for INTEL CORPORATION

Address all correspondence to:  
LISA A. HAILE, J.D., PH.D.  
GRAY CARY WARE & FREIDENRICH LLP  
4365 Executive Drive, Suite 1100  
San Diego, CA 92121

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so

made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Narayanan Sundararajan

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 126 Crespi Drive, San Francisco, CA 94132

Citizenship: India

Post Office Address: 126 Crespi Drive, San Francisco, CA 94132

Full name of second inventor: Lei Sun

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 2335 Falling Water Court, Santa Clara, CA 95054

Citizenship: Peoples Republic of China

Post Office Address: 2335 Falling Water Court, Santa Clara, CA 95054

Full name of third inventor: Yuegang Zhang

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 7974 Woodlark Way, Cupertino, CA 95014

Citizenship: Peoples Republic of China

Post Office Address: 7974 Woodlark Way, Cupertino, CA 95014

Full name of fourth inventor: Xing Su

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 21811 Granada Avenue, Cupertino, CA 95014

Citizenship: USA

Post Office Address: 21811 Granada Avenue, Cupertino, CA 95014

Full name of fifth inventor: Selena Chan

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 65 Rio Robles East, #3311, San Jose, CA 95134

Citizenship: USA

Post Office Address: 65 Rio Robles East, #3311, San Jose, CA 95134

Full name of sixth inventor: Tae-Woong Koo

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 849 W. Orange Avenue, #3015, South San Francisco, CA 94080

Citizenship: Republic of Korea

Post Office Address: 849 W. Orange Avenue, #3015, South San Francisco, CA 94080

Full name of seventh inventor: Andrew A. Berlin

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 1789 Dalton Place, San Jose, CA 95054

Citizenship: USA

Post Office Address: 1789 Dalton Place, San Jose, CA 95054

## Appendix A

John L. Adair, Reg. No. 48,828; Ari G. Akmal, Reg. No. 51,338; David L. Alberti, Reg. No. 43,465; Daryl Basham, Reg. No. 45,869; John J. Bruckner, Reg. No. 35,816; Lisa A. Haile, Reg. No. 38,347; Jacob V. Handy, Reg. No. 48,347; Richard J. Imbra, Reg. No. 37,643; Peter R. Leal, Reg. No. 24,226; June M. Learn, Reg. No. 31,238; Alan Limbach, Reg. No. 39,749; George Limbach, Reg. No. 19,305; Karl Limbach, Reg. No. 18,689; Timothy W. Lohse, Reg. No. 35,255; Dean Nakamura, Reg. No. 33,981; Antony Novom, Reg. No. 45,517; Michael T. Rosato, Reg. No. 52,182; Gerald Sekimura, Reg. No. 30,103; Michael P. Shevlin, Reg. No. 38,724; Tamara Shields, Reg. No. 52,221; Andrew V. Smith, Reg. No. 43,132; Steven R. Sprinkle, Reg. No. 40,825; Kieun J. Sung, Reg. No. 48,639; Mark Takahashi, Reg. No. 38,631; Emanuel J. Vacchiano, Reg. No. 43,964; Edward Weller, Reg. No. 37,468; Nan Wu, Reg. No. 43,360; Ronald Yin, Reg. No. 27,607; Barry N. Young, Reg. No. 27,744; my patent attorneys, and my patent agents, of GRAY CARY WARE & FREIDENRICH LLP, with offices located at 4365 Executive Drive, Suite 1100, San Diego, California 92121-2133, telephone (858) 677-1456; and

Alan K. Aldous, Reg. No. 31,905; Rob D. Anderson, Reg. No. 33,826; Shireen I. Bacon, Reg. No. 40,494; Michael Barre, Reg. No. 44,023; Jay P. Beale, Reg. No. 50,901; R. Edward Brake, Reg. No. 37,784; Ben Burge, Reg. No. 42,372; Robert Chang, Reg. No. 48,765; George Chen, Reg. No. 50,807; Glen B. Choi, Reg. No. 43,546; Kenneth Cool, Reg. No. 40,570; Ted A. Crawford, Reg. No. 50,610; Robert Diehl, Reg. No. 40,992; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Reg. No. 39,973; Christopher Gagne, Reg. No. 36,142; Sharmini N. Green, Reg. No. 41,410; Robert Greenberg, Reg. No. 44,133; Bradley Greenwald, Reg. No. 34,341; Libby Hope, Reg. No. 46,774; Jeffrey B. Huter, Reg. No. 41,086; Seth Z. Kalson, Reg. No. 40,670; Peter Lam, Reg. No. 44,855; Issac Lin, Reg. No. 50,672; Anthony Martinez, Reg. No. 44,223; Molly McCall, Reg. No. 46,126; Larry Mennemeier, Reg. No. 51,003; Paul Nagy, Reg. No. 37,896; Michael J. Nesheiwat, Reg. No. 47,819; Dennis A. Nicholls, Reg. No. 42,036; Lanny Parker, Reg. No. 44,281; Alan Pedersen-Giles, Reg. No. 39,996; Michael D. Plimier, Reg. No. 43,004; Michael Proksch, Reg. No. 43,021; Kevin A. Reif, Reg. No. 36,381; Crystal D. Sayles, Reg. No. 44,318; Russell Scott, Reg. No. 43,103; Kenneth M. Seddon, Reg. No. 43,105; Mark Seeley, Reg. No. 32,299; Ami P. Shah, Reg. No. 42,143; David Simon, Reg. No. 32,756; Steven P. Skabrat, Reg. No. 36,279; Paul E. Steiner, Reg. No. 41,326; Joni D. Stutman-Horn, Reg. No. 42,173; David Tran, Reg. No. 50,804; John F. Travis, Reg. No. 43,203; Robert Wawrzyn, Reg. No. 54,654; Calvin E. Wells, Reg. No. 43,256; Stuart Whittington, Reg. No. 45,215; Michael Willardson, Reg. No. 50,856; Robert Winkle, Reg. No. 37,474; Rita Wisor, Reg. No. 41,382; Sharon Wong, Reg. No. 37,760; and Steven D. Yates, Reg. No. 42,242; my patent attorneys, and my patent agents, of INTEL CORPORATION, with offices located at 2200 Mission College Blvd., Santa Clara, CA 95052, telephone (408)765-8080; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

## Appendix B

### Title 37, Code of Federal Regulations, Section 1.56 Duty to Disclose Information Material to Patentability

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office of submitted to the Office in the manner prescribed by § 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applications to carefully examine:

(1) Prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;

or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the Office, or
- (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application;

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.